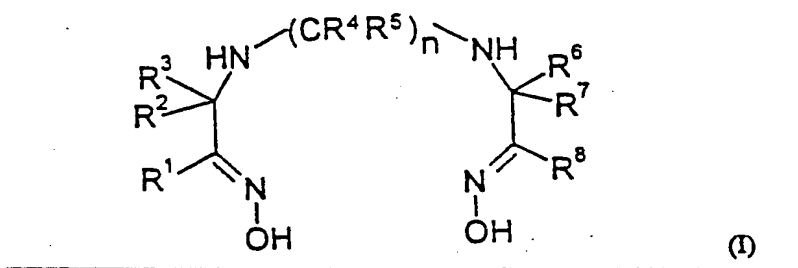


This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently Amended): A method for treating a proliferative disease comprising placing an administration catheter on the site of a lesion, and administering a radioactive substance topically via the catheter to the site of the lesion, followed by removing the catheter the radioactive substance remaining on the site of the lesion,
wherein the radioactive substance is a metal complex that has a ligand which is a bis-amine-oxime compound of formula I,



in which n = 0 - 3, and radicals R¹ to R⁸ are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic C₁-C₁₀₀ alkyl, C₁-C₁₀₀ alkenyl, C₁-C₁₀₀ alkynyl, C₁-C₁₀₀ aryl, C₁-C₁₀₀ alkylaryl or C₁-C₁₀₀ arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxy carbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein radicals R² and R³, R⁴ and R⁵, and/or R⁶ and R⁷

or

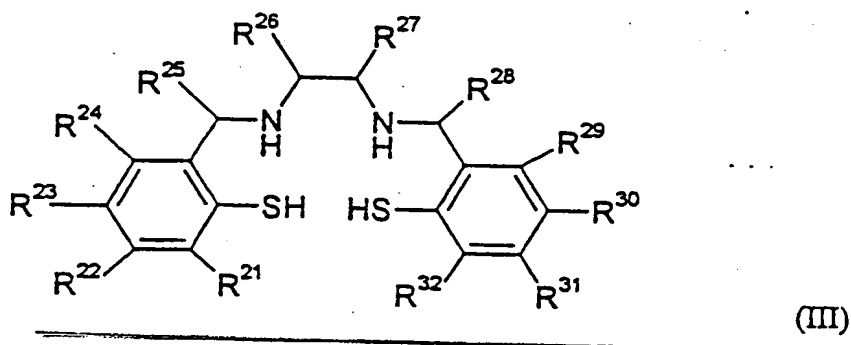
$$\begin{array}{c} \text{R}^{14} \\ | \\ \text{R}^{13} - \text{C} - \text{C} - \text{R}^{15} \\ | \quad | \quad | \quad | \\ \text{R}^{12} \quad \text{R}^{16} \\ | \quad | \\ \text{R}^{11} \quad \text{R}^{10} \\ | \quad | \\ \text{R}^9 \quad \text{SH} \end{array} \quad \text{NH} \quad \text{NH} \quad \begin{array}{c} \text{R}^{17} \\ | \\ \text{R}^{18} \\ | \quad | \\ \text{R}^{19} \quad \text{R}^{20} \\ | \\ \text{HS} \end{array} \quad \begin{array}{c} \text{R}^{14} \\ | \\ \text{R}^{13} - \text{C} - \text{C} - \text{R}^{15} \\ | \quad | \quad | \quad | \\ \text{R}^{12} \quad \text{R}^{16} \\ | \quad | \\ \text{R}^{11} \quad \text{R}^{10} \\ | \quad | \\ \text{R}^9 \quad \text{SH} \end{array} \quad \text{NH} \quad \text{NH} \quad \begin{array}{c} \text{R}^{17} \\ | \\ \text{R}^{18} \\ | \quad | \\ \text{R}^{19} \quad \text{R}^{20} \\ | \\ \text{HS} \end{array} \quad \text{P}$$

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and wherein the compound of formula II contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83,

or

a metal complex that has a ligand which is an N₂S₂ compound of formula III,



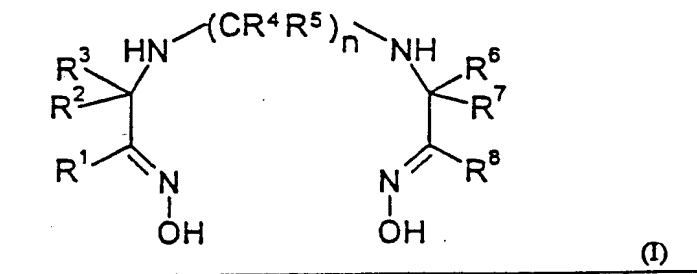
wherein R²¹ to R³² are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic C₁-C₁₀₀ alkyl, C₁-C₁₀₀ alkenyl, C₁-C₁₀₀ alkynyl, C₁-C₁₀₀ aryl, C₁-C₁₀₀ alkylaryl or C₁-C₁₀₀ arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxycarbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms, and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein the compound of formula III contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83,

or

a metal complex that has a ligand which is a porphyrin compound or a thallium compound of isotope ²⁰¹Tl, ²⁰⁷Tl, ²⁰⁹Tl or ²¹⁰Tl, or a tetrofosmin compound, a sestamibi compound, a

furifosmin compound, a colloidal solution with particle sizes of between 5 and 1000 nm, or ^{99m}Tc -tin colloid or ^{186}Re -tin colloid.

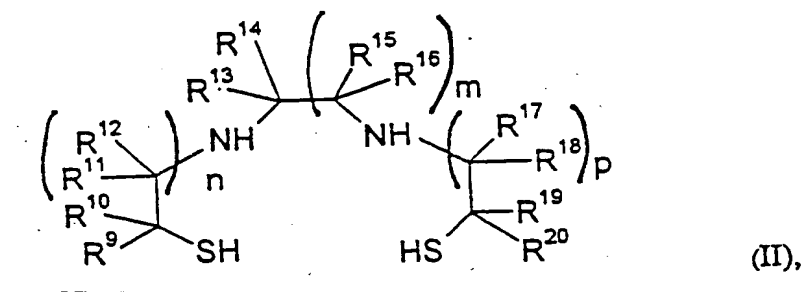
Claim 2 (Currently Amended): A method for treating an arteriosclerotic disease comprising placing an administration catheter on the site of a lesion, and administering a radioactive substance topically via the catheter to the site of the lesion, followed by removing the catheter the radioactive substance remaining on the site of the lesion,
wherein the radioactive substance is a metal complex that has a ligand which is a bis-amine-oxime compound of formula I,



in which $n = 0 - 3$, and radicals R^1 to R^8 are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic C_1 - C_{100} alkyl, C_1 - C_{100} alkenyl, C_1 - C_{100} alkynyl, C_1 - C_{100} aryl, C_1 - C_{100} alkylaryl or C_1 - C_{100} arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxycarbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein radicals R^2 and R^3 , R^4 and R^5 , and/or R^6 and R^7 together optionally are an oxygen atom, and wherein the compound of formula I contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83,

or

a metal complex that has a ligand which is an N₂S₂ compound of formula II,



wherein R⁹ to R²⁰ are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic C₁-C₁₀₀ alkyl, C₁-C₁₀₀ alkenyl, C₁-C₁₀₀ alkynyl, C₁-C₁₀₀ aryl, C₁-C₁₀₀ alkylaryl or C₁-C₁₀₀ arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxy, carbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms, and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein radicals R¹¹ and R¹², R¹³ and R¹⁴, R¹⁵ and R¹⁶, and/or R¹⁷ and R¹⁸ together optionally are an oxygen atom, and n, m and p, independently of one another, mean 1 or 2, and wherein the compound of formula II contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83,

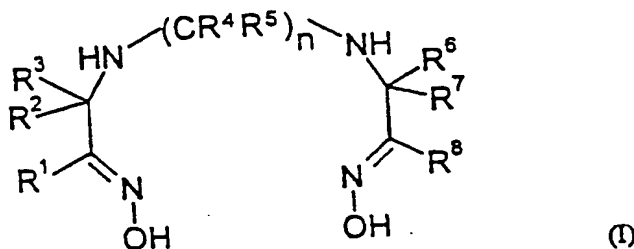
or

a metal complex that has a ligand which is an N₂S₂ compound of formula III,

wherein R^{21} to R^{32} are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic C_1 - C_{100} alkyl, C_1 - C_{100} alkenyl, C_1 - C_{100} alkynyl, C_1 - C_{100} aryl, C_1 - C_{100} alkylaryl or C_1 - C_{100} arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxy, carbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms, and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein the compound of formula III contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83, or a colloidal solution with particle sizes of between 5 and 1000 nm.

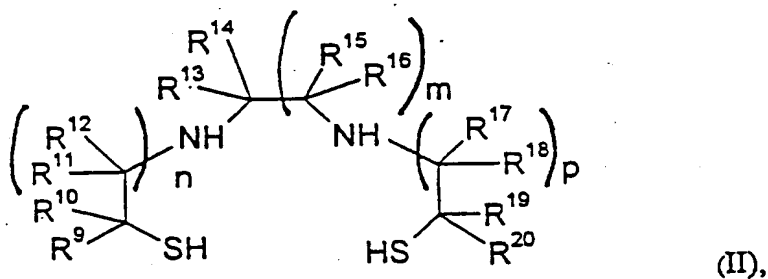
Claim 3 (Cancelled)

Claim 4 (Previously Presented): A method according to claim 1, wherein the radioactive substance is a metal complex that has a ligand which is a bis-amine-oxime compound of formula I,



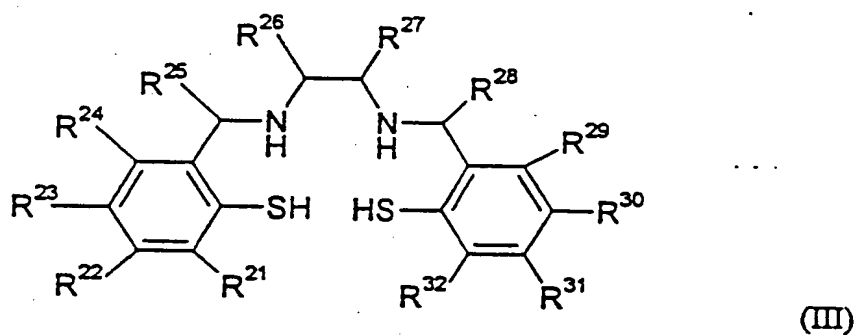
in which $n = 0 - 3$, and radicals R^1 to R^8 are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic C_1 - C_{100} alkyl, C_1 - C_{100} alkenyl, C_1 - C_{100} alkynyl, C_1 - C_{100} aryl, C_1 - C_{100} alkylaryl or C_1 - C_{100} arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxycarbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein radicals R^2 and R^3 , R^4 and R^5 , and/or R^6 and R^7 together optionally are an oxygen atom, and wherein the compound of formula I contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83.

Claim 5 (Previously Presented): A method according to claim 1, wherein the radioactive substance is a metal complex that has a ligand which is an N_2S_2 compound of formula II,



wherein R^9 to R^{20} are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic C_1 - C_{100} alkyl, C_1 - C_{100} alkenyl, C_1 - C_{100} alkynyl, C_1 - C_{100} aryl, C_1 - C_{100} alkylaryl or C_1 - C_{100} arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxycarbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms, and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein radicals R^{11} and R^{12} , R^{13} and R^{14} , R^{15} and R^{16} , and/or R^{17} and R^{18} together optionally are an oxygen atom, and n, m and p, independently of one another, mean 1 or 2, and wherein the compound of formula II contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83.

Claim 6 (Previously Presented): A method according to claim 1, wherein the radioactive substance is a metal complex that has a ligand which is an N_2S_2 compound of formula III,



wherein R^{21} to R^{32} are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic C_1 - C_{100} alkyl, C_1 - C_{100} alkenyl, C_1 - C_{100} alkynyl, C_1 - C_{100} aryl, C_1 - C_{100} alkylaryl or C_1 - C_{100} arylalkyl radical, which optionally is substituted with one or more of

fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxycarbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms, and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein the compound of formula III contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83.

Claim 7 (Previously Presented): A method according to claim 4, wherein a central atom is ^{99m}Tc , ^{186}Re , ^{188}Re , ^{67}Cu , ^{90}Y or ^{107}Ag .

Claim 8 (Previously Presented): A method according to claim 1, wherein the radioactive substance is a metal complex that has a ligand which is a porphyrin compound.

Claim 9 (Previously Presented): A method according to claim 1, wherein the radioactive substance is a thallium compound of isotope ^{201}Tl , ^{207}Tl , ^{209}Tl or ^{210}Tl .

Claim 10 (Previously Presented): A method according to claim 1, wherein the radioactive substance is $^{201}\text{TlCl}$.

Claim 11 (Previously Presented): A method according to claim 1, wherein the radioactive substance is a tetrofosmin compound.

Claim 12 (Previously Presented): A method according to claim 1, wherein the radioactive substance is a sestamibi compound.

Claim 13 (Previously Presented): A method according to claim 1, wherein the radioactive substance is a furifosmin compound.

Claim 14 (Previously Presented): A method according to claim 1, wherein the radioactive substance is a colloidal solution with particle sizes of between 5 and 1000 nm.

Claim 15 (Previously Presented): A method according to claim 1, wherein the radioactive substance is ^{99m}Tc -tin colloid or ^{186}Re -tin colloid.

Claim 16-21 (Cancelled)

Claim 22 (Previously Presented): A method according to claim 14, wherein the colloidal solution is labeled with a radionuclide that is selected from Ag, As, At, Au, Ba, Bi, Br, C, Co, Cr, Cu, F, Fe, Ga, Gd, Hg, Ho, I, In, Ir, Lu, Mn, N, O, P, Pb, Pd, Pm, Re, Rh, Ru, Sb, Sc, Se, Sm, Sn, Tb, Tc and Y.

Claim 23 (Previously Presented): A method according to claim 22, wherein the colloidal solution is labeled with a radionuclide that is selected from ^{99m}Tc , ^{186}Re , ^{188}Re , ^{67}Cu , ^{90}Y , ^{153}Sm , ^{160}Tb , ^{162}Tb , ^{198}Au and ^{107}Ag .

Claim 24 (Previously Presented): A method according to claim 22, wherein the colloidal solution is prepared by a redox reaction in the presence of a radioactive salt.

Claim 25 (Previously Presented): A method according to claim 22, wherein the colloidal solution is prepared by changing the pH in an aqueous or alcoholic solution in the presence of a radioactive salt.

Claim 26 (cancelled)

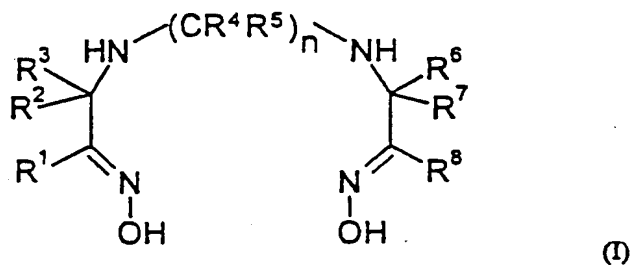
Claim 27 (Previously Presented): A method according to claim 22, wherein the particle size of the colloidal particles is between 300 and 600 nm.

Claim 28 (Previously Presented): A method according to claim 22, wherein the colloidal solution is stabilized with the aid of a surfactant or an amphiphilic substance.

Claim 29 (Previously Presented): A method according to claim 22, wherein the colloidal solution comprises radiolabeled sulfur colloids.

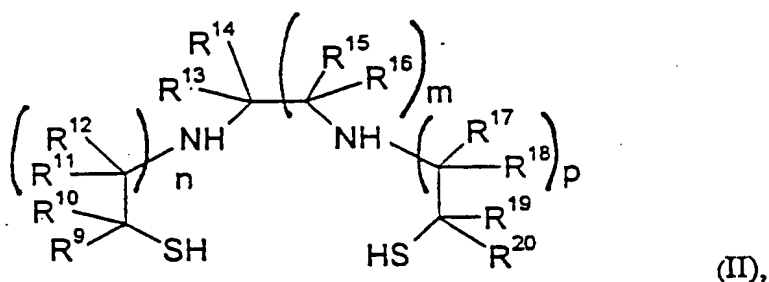
Claim 30 (Cancelled):

Claim 31 (Previously Presented): A method according to claim 2, wherein the radioactive substance is a metal complex that has a ligand which is a bis-amine-oxime compound of formula I,



in which $n = 0 - 3$, and radicals R^1 to R^8 are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic C_1 - C_{100} alkyl, C_1 - C_{100} alkenyl, C_1 - C_{100} alkynyl, C_1 - C_{100} aryl, C_1 - C_{100} alkylaryl or C_1 - C_{100} arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxycarbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein radicals R^2 and R^3 , R^4 and R^5 , and/or R^6 and R^7 together optionally are an oxygen atom, and wherein the compound of formula I contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83.

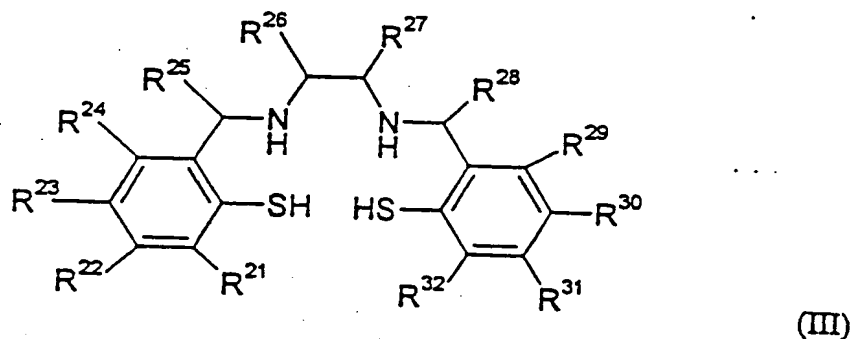
Claim 32 (Previously Presented): A method according to claim 2, wherein the radioactive substance is a metal complex that has a ligand which is an N_2S_2 compound of formula II,



wherein R^9 to R^{20} are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic C_1 - C_{100} alkyl, C_1 - C_{100} alkenyl, C_1 - C_{100} alkynyl, C_1 - C_{100} aryl, C_1 - C_{100} alkylaryl or C_1 - C_{100} arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxycarbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms, and optionally is interrupted

and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein radicals R^{11} and R^{12} , R^{13} and R^{14} , R^{15} and R^{16} , and/or R^{17} and R^{18} together optionally are an oxygen atom, and n, m and p, independently of one another, mean 1 or 2, and wherein the compound of formula II contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83.

Claim 33 (Previously Presented): A method according to claim 2, wherein the radioactive substance is a metal complex that has a ligand which is an N_2S_2 compound of formula III,



wherein R^{21} to R^{32} are the same or different and each are a hydrogen atom, an unbranched, branched, cyclic or polycyclic C_1 - C_{100} alkyl, C_1 - C_{100} alkenyl, C_1 - C_{100} alkynyl, C_1 - C_{100} aryl, C_1 - C_{100} alkylaryl or C_1 - C_{100} arylalkyl radical, which optionally is substituted with one or more of fluorine, chlorine, bromine, iodine, hydroxy, oxo, carboxy, aminocarbonyl, alkoxycarbonyl, amino, aldehyde or alkoxy groups with up to 30 carbon atoms, and optionally is interrupted and/or substituted by one or more heteroatoms selected from N, P, As, O, S, and Se, and wherein the compound of formula III contains a central atom that is a radionuclide of an element of atomic number 27, 29, 30, 31, 32, 37, 38, 39, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 62, 64, 70, 75, 77, 82 or 83.

Claim 34 (Previously Presented): A method according to claim 2, wherein the radioactive substance is a colloidal solution with particle sizes of between 5 and 1000 nm.